

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A method of modulating cholesterol efflux in a cell, said method comprising
modulating expression and/or activity of sterol 27-hydroxylase (CYP27) and/or caveolin-1 or equivalent thereof in the cell.
2. (Original) A method according to claim 1 wherein the cell is selected from the group including hepatic cells or hepatocytes, macrophages, endothelial cells, smooth muscle cells and other cells of the vessel wall and stem cells.
3. (Original) A method according to claim 2 wherein the expression and/or activity of CYP27 and/or caveolin-1 or equivalent thereof is modulated in a cell deriving from a vessel wall associated with an atherosclerotic plaque.
- 4-8 (Canceled)
9. (Currently Amended) A method according to ~~any one of claims 1 to 8~~ claim 1 wherein the cholesterol effluxed is substantially non-oxidised cholesterol.
10. (Currently Amended) A method according to ~~any one of claims 1 to 9~~ claim 1 wherein the cell is transfected with an operably linked CYP27 and/or caveolin-1 gene or equivalent thereof to modulate expression and/or activity of CYP27 and/or caveolin-1 in the cell.
11. (Currently Amended) A method according to ~~any one of claims 1 to 10~~ claim 1 wherein the cell is further treated with a demethylating agent.
12. (Currently Amended) ~~A method~~ A method according to claim 11 wherein the demethylating agent is 5-azacytidine.
13. (Original) A method of increasing cholesterol efflux in a cell, said method comprising increasing expression and/or activity of sterol 27-hydroxylase (CYP27) and/or caveolin-1 or equivalent thereof in the cell.
14. (Original) A method according to claim 13 wherein the expression of the gene encoding CYP27 and/or caveolin-1 or equivalent thereof is increased.

15. (Currently Amended) A method according to claim 13 ~~or 14~~ wherein the activity of CYP27 and/or caveolin-1 or equivalent thereof is increased.

16. (Original) A method according to claim 13 wherein the cell is transfected with a gene encoding CYP27 and/or caveolin-1 or equivalent thereof and expression of the gene is increased to increase cholesterol efflux.

17. (Currently Amended) A method according to ~~any one of claims 13 to 16~~ claim 13 wherein the cell is further treated with a demethylating agent.

18. (Original) A method according to claim 17 wherein the demethylating agent is 5-azacytidine.

19. (Currently Amended) A method according to ~~any one of claims 14 to 18~~ claim 14 wherein the gene is induced to increase expression and/or activity of CYP27 and/or caveolin-1 or equivalent thereof.

20. (Currently Amended) A method according to ~~any one of claims 13 to 19~~ claim 13 wherein the cell is selected from the group including hepatic cells or hepatocytes, macrophages, endothelial cells, smooth muscle cells and other cells of the vessel wall and stem cells.

21. (Original) A method according to claim 20 wherein the expression and/or activity of CYP27 and/or caveolin-1 or equivalent thereof is modulated in a cell deriving from a vessel wall associated with an atherosclerotic plaque.

22-26 (Canceled)

27. (Currently Amended) A method according to ~~any one of claims 13 to 26~~ claim 13 wherein the cholesterol effluxed is substantially non-oxidised cholesterol.

28. (Original) A cell having modulated cholesterol efflux, said cell comprising modulated expression and/or activity of CYP27 and/or caveolin-1 or equivalent thereof.

29. (Original) A cell according to claim 28 wherein the cell is transfected with a gene encoding CYP27 and/or caveolin-1 or equivalent thereof.

30. (Currently Amended) A cell according to claim 28 ~~or 29~~ selected from the group including hepatic cells or hepatocytes, macrophages, endothelial cells, smooth muscle cells, cells of the vessel wall and stem cells.

31-33 (Canceled)

34. (Currently Amended) A cell according to ~~any one of claims 28 to 33~~ claim 28 having increased cholesterol efflux, said cell comprising increased expression and/or activity of CYP27 and/or caveolin-1 or equivalent thereof.

35. (Original) A method of treating a cholesterol related condition in a patient by modulating cholesterol efflux from a cell of the patient, said method comprising:
modulating expression and/or activity of CYP27 and/or caveolin-1 or equivalent thereof in the cell.

36. (Currently Amended) A method ~~of treating a cholesterol related condition in a patient~~ according to claim 35 by modulating cholesterol efflux in a cell in the patient, said method comprising:

introducing a gene construct to modulate expression and/or activity of CYP27 and/or caveolin-1 or equivalent thereof in the cell of the patient.

37. (Original) A method according to claim 36 wherein the gene construct includes a gene encoding CYP27 and/or a CYP27 regulator and/or caveolin-1 and/or a caveolin-1 regulator.

38. (Currently Amended) A method according to ~~any one of claims 35 to 37~~ claim 35 wherein the expression and/or activity of CYP27 and/or caveolin-1 is increased.

39. (Original) A method of treating a cholesterol related condition in a patient by modulating cholesterol efflux in the patient, said method comprising:
introducing a modulated cell to the patient, wherein said cell comprises modulated expression and/or activity of CYP27 and/or caveolin-1 or equivalent thereof.

40. (Original) A method according to claim 39 wherein the modulated cell is transfected with a gene encoding CYP27 and/or caveolin-1 or equivalent thereof.

41. (Currently Amended) A method according to claim 39 ~~or 40~~ wherein the expression and/or activity of CYP27 and/or caveolin-1 or equivalent thereof in the modulated cells is increased.

42. (Currently Amended) A method according to ~~any one of claims 34 to 40~~ claim 39 wherein the cells are selected from the group including hepatic cells or hepatocytes, macrophages, endothelial cells, smooth muscle cells and other cells of the vessel wall and stem cells.

43-47 (Canceled)

48. (Currently Amended) A method according to ~~any one of claims 39 to 47~~ claim 39 wherein the cells are introduced into a region of disease associated with cholesterol accumulation.

49. (Original) A method according to claim 48 wherein the cells are introduced to vessel cells which line the vessel.

50. (Currently Amended) A method according to ~~any one of claims 39 to 49~~ claim 39 wherein the cholesterol related condition is selected from the group including myocardial infarction, atherosclerosis, stroke, hypoalphalipoproteinaemia or peripheral vascular disease.

51. (Original) A method according to claim 50 wherein the cholesterol related condition is atherosclerosis.

52. (Original) A method of identifying a compound which modulates cholesterol efflux in a cell, said method comprising:
contacting the compound to the cell;
detecting a change in expression and/or activity of CYP27 and/or caveolin-1 or equivalent thereof in the cell relative to a cell which has not been contacted with the compound.

53. (Currently Amended) A method according to claim 52 wherein the cell is selected ~~from~~ from the group including endothelial cells, smooth muscle cells and vessel cells, hepatic cells or hepatocytes, macrophages, and stem cells.

54. (Canceled)

55. (Currently Amended) A method according to claim 54 53 wherein the cell is a hepatocyte transfected with caveolin-1.

56. (Currently Amended) A method according to claim 54 ~~or~~ 55 wherein the cell is a HepG2 cell.

57. (Currently Amended) A composition ~~when used for treating a cholesterol-related condition, said composition~~ comprising:

a compound identified by the method of claim 52, which compound is present in an amount effective to treat the a cholesterol-related condition wherein said compound is identified by the method according to any one of claims 52 to 56; and
~~admixing the compound.~~

58. (Canceled)

59. (New) A method according to claim 35 wherein the cells are selected from the group including hepatic cells or hepatocytes, macrophages, endothelial cells, smooth muscle cells and other cells of the vessel wall, and stem cells.